From: **Terri-A White/R3/USEPA/US**
Sent: 4/4/2012 12:19:56 PM

To: Dennis Carney/R3/USEPA/US@EPA; Gerald Heston/R3/USEPA/US@EPA
CC: Richard Fetzer/R3/USEPA/US@EPA; seneca.roy@epa.gov
Subject: Fw: question from Ron Bishop - Methane in wells

Dennis,

Can your office handle this inquiry please? It is not from a reporter but rather a scientist who was contacted by a Bloomberg reporter (Mark Drajem). Drajem has been covering Dimock and has sought out outside scientists for their review of our well sampling results. (see his email below). Last week, we responded to questions he had about methane levels in the first 11 wells we sampled.

Please copy Roy and me on your response to Mr. Bishop, please. Thanks. -- Terri
----- Forwarded by Terri-A White/R3/USEPA/US on 04/04/2012 12:08 PM -----

From: Terri-A White/R3/USEPA/US
To: "Bishop, Ron" <Ron.Bishop@oneonta.edu>
Cc: Roy Seneca/R3/USEPA/US@EPA
Date: 04/04/2012 12:07 PM
Subject: Re: question from Ron Bishop

Hi Mr.Bishop,

I appreciate the information you have provided. I will forward it to our technical and health experts who are qualified to respond. -- Terri

From: "Bishop, Ron" <Ron.Bishop@oneonta.edu>
To: Terri-A White/R3/USEPA/US@EPA
Cc: Roy Seneca/R3/USEPA/US@EPA
Date: 03/31/2012 11:44 AM
Subject: question from Ron Bishop

Terri,

I note with interest the rationale you gave Mark Drajem of Bloomberg News for the trigger level of 28 ppm methane in water: that is the maximum that is soluble in water, according to OSM.

I have to tell you, this is dangerously simplistic. As with all gases dissolved in water, methane is more soluble in cold water (up to 37 mg/L), less soluble at room temperature (about 23 mg/L), and far less soluble at 125 deg. F (about 13 mg/L).

For homeowners whose water contains more than 13 mg/L methane, have you counseled them to not heat their water, or at least to agressively ventilate their basements, bathrooms and kitchens if they do choose to heat their water?

I look forward to your reponse.

Ronald E. Bishop, Ph.D., CHO
Chemistry and Biochemistry Department
SUNY College at Oneonta

From: MARK DRAJEM (BLOOMBERG/ NEWSROOM:) [mdrajem@bloomberg.net]
Sent: Friday, March 30, 2012 9:42 AM
To: Bishop, Ron,
Subject: Fwd:Re: Dimock - follow up

The EPA's reasoning on choosing 28 ppm

----- Original Message -----
From: White.Terri-A@epamail.epa.gov
To: MARK DRAJEM (BLOOMBERG/ NEWSROOM:)
Cc: Seneca.Roy@epamail.epa.gov
At: 3/29 18:22:26

Hi Mark,

Here are responses.

Are you concerned about the high levels of methane?

As part of our sampling efforts, when a well is found to have methane levels above 28 ppm, we immediately take action to notify the resident, the state, and the county emergency management agency. This would also trigger a toxicological review and expedite a quality assurance review.

EPA found one out of the 11 homes in the first round of samples that is above the 28ppm level. This well was not connected to the residence at the time of the sample because the resident was receiving alternate water from Cabot. EPA has notified that resident, who indicated they were already aware that their water contained levels of methane. EPA also notified Pennsylvania DEP and the Susquehanna County EMA, and can work with local officials to provide recommendations to affected residents in the event that use of well water is resumed. EPA will continue to follow this process should there be any similar instance.

As there is no MCL for methane, EPA selected a screening level used by the federal Office of Surface Mining(OSM) of 28 parts per million for dissolved methane in drinking water. 28 ppm is the maximum level of methane than can be dissolved in water before the methane leaves solution and enters the air as a gas. Methane is not explosive while in solution and OSM reports that methane in water does not impair the odor, taste or color nor does it affect in anyway the potability of the water. The potential for methane in air to create an explosive environment depends on a number of factors, such as: the concentration, the volume of the space and frequency of air exchanges in the space.

Do you have any view on whether it is caused by the gas drilling?

At this time, EPA has not done any detailed review to determine the cause. Our focus is first and foremost on drinking water quality of residents.

From: "MARK DRAJEM (BLOOMBERG/ NEWSROOM:)" <mdrajem@bloomberg.net>
To: Roy Seneca/R3/USEPA/US@EPA
Cc: Terri-A White/R3/USEPA/US@EPA
Date: 03/29/2012 05:03 PM
Subject: Re: Dimock - follow up

Guys - Just want to reconnect on this. Should I expect a response? Thanks,
Mark

----- Original Message -----

From: MARK DRAJEM (BLOOMBERG/ NEWSROOM:)
To: Seneca.Roy@epamail.epa.gov
Cc: White.Terri-A@epamail.epa.gov
At: 3/29 14:50:32

Roy, As I said, I had some outside scientists (Duke, Rochester and Oneonta) look at the EPA results from five of the wells, which I was given. They noted the high levels of methane in those samples and said that is likely caused by the drilling in the area and is consistent with their testing of water in that area. Are you concerned about the high levels of methane? Do you have any view on whether it is caused by the gas drilling? Thanks, Mark

----- Original Message -----
From: Seneca.Roy@epamail.epa.gov
To: MARK DRAJEM (BLOOMBERG/ NEWSROOM:)
Cc: White.Terri-A@epamail.epa.gov
At: 3/29 14:12:32

Mark -- Sorry for not getting back to you sooner. Here are the responses to your questions.

Have you had your meetings with residents?

Residents from seven of the first 11 homes sampled have requested follow-up meetings with representatives of EPA and ATSDR. We have four meetings scheduled for today and tomorrow, and are working on scheduling the remaining three meetings.

Have you notified the state DEP about the methane levels?

Yes, we have provided the sampling results to the state.

Do you have any timeline for releasing the next round of results?

EPA plans to share results with residents from the next group of sampled homes when we receive validated results and prepare data packages. We can

put your contact information on a list for any future EPA announcement about this information.

Roy Seneca
EPA Region 3 Press Officer
Office of Public Affairs
seneca.roy@epa.gov
(215) 814-5567

From: "MARK DRAJEM (BLOOMBERG/ NEWSROOM:)" <mdrajem@bloomberg.net>
To: Roy Seneca/R3/USEPA/US@EPA
Date: 03/29/2012 11:03 AM
Subject: Dimock - follow up

Roy - And one more: Do you have any timeline for releasing the next round

of results? Thanks, Mark

----- Original Message -----
From: MARK DRAJEM (BLOOMBERG/ NEWSROOM:)
To: Seneca.Roy@epamail.epa.gov
Cc: Alcantara.Betsaida@epamail.epa.gov, White.Terri-A@epamail.epa.gov
At: 3/29 10:36:43

Roy - I just tried to reach you for a story I am writing today about Dimock. I had some outside folks look at some of the test results you found, and they are pointing the high levels of methane found in some/most

of the wells. Have you had your meetings with residents? Have you notified

the state DEP about the methane levels? Thanks, Mark Drajem 202 624 1964

----- Original Message -----
From: Seneca.Roy@epamail.epa.gov
To: MARK DRAJEM (BLOOMBERG/ NEWSROOM:)
Cc: Alcantara.Betsaida@epamail.epa.gov, White.Terri-A@epamail.epa.gov
At: 3/15 19:11:38

Here is the EPA statement we are issuing today about the first round of sampling at 11 homes.

On Jan. 19, as a result of requests from residents and a review of the data we had in hand, EPA announced it would perform water sampling at approximately 60 homes in the Carter Road/Meshoppen Creek Road area of Dimock, Pa. to further assess whether any residents are being exposed to hazardous substances that cause health concerns.

The first round of sampling results is now available for the first 11 homes that were tested during the week of Jan. 23. Sampling results from these 11 homes did not show levels of contamination that could present a health concern. Samples from six of the 11 homes did show concentrations of sodium, methane, chromium or bacteria, but concentrations were all within the safe range for drinking water. The sampling results also identified the presence of arsenic at two homes.

Out of the 11 homes tested, there are currently three homes receiving an alternate water supply provided by EPA. EPA will continue to provide water

to these homes while we perform additional sampling to ensure that the drinking water quality at these homes remains consistent and acceptable for use over time. EPA is also taking a second round of samples from the two homes where arsenic was detected, and although the levels meet drinking water standards, we will resample to better characterize the water quality of these wells. After receiving results from the second round of sampling, EPA will re-evaluate the need to continue providing an alternate water source.

EPA has offered to meet with all the residents to go over their data and answer any health-related concerns. As further quality assured data becomes available for the remaining homes, we will share with the homeowners in an expedited manner. Our actions will continue to be based on the science and the law as we work to help get a clear picture of water

quality for these homes in Dimock.

Roy Seneca
EPA Region 3 Press Officer
Office of Public Affairs
seneca.roy@epa.gov
(215) 814-5567[attachment "alt_body.html" deleted by Roy Seneca/R3/USEPA/US][attachment "alt_body.html" deleted by Terri-A White/R3/USEPA/US] [attachment "alt_body.html" deleted by Terri-A White/R3/USEPA/US]